

Application Serial No. 10/657,311
Amendment dated September 21, 2004
Reply to Office Action dated August 23, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)
2. (currently amended): The compressor assembly of ~~claim 1~~ claim 4 further comprising a counterweight disposed on said shaft between said first and second openings within said partial enclosure.
3. (currently amended): The compressor assembly of ~~claim 1~~ claim 4 wherein said baffle member is positioned radially outwardly of said aperture.
4. (currently amended): ~~The compressor assembly of claim 1~~ A compressor assembly comprising:
 - a housing defining an interior plenum and having an inlet opening;
 - a stationary scroll member fixed within said housing;
 - an orbiting scroll member disposed within said housing and engaged with said stationary scroll member;
 - an oil sump disposed within said interior plenum;
 - a shaft rotatable about a shaft axis, said shaft operably coupled with said orbiting scroll member;
 - a motor operably coupled with said shaft;
 - a crankcase fixed within said housing and disposed between said orbiting scroll member and said motor, said crankcase having a thrust surface engageable with said orbiting scroll member and defining a first opening, said crankcase including a bearing support portion defining a second opening, said shaft freely extending through said first opening and extending through and bearingly supported at said second opening;

said crankcase having a shield portion extending from proximate said first opening to proximate said second opening and defining a partial enclosure for said shaft between said first opening and said second opening, said shield portion defining an aperture providing fluid communication between said interior plenum and said partial enclosure, said aperture axially extending from proximate said first opening to proximate said second opening, said shield portion circumferentially extending about said shaft through an arc of at least 180 degrees and spaced radially outwardly of said shaft;

a sheet-like baffle member secured to said crankcase and positioned proximate said inlet opening;

wherein said crankcase includes a plurality of legs extending from proximate said thrust surface substantially parallel to said shaft axis and having distal ends engageable with said motor; and

said baffle member being secured to at least one of said legs.

5. (currently amended): ~~The compressor assembly of claim 1~~ A compressor assembly comprising:

a housing defining an interior plenum and having an inlet opening;
a stationary scroll member fixed within said housing;

an orbiting scroll member disposed within said housing and engaged with said stationary scroll member;

an oil sump disposed within said interior plenum;
a shaft rotatable about a shaft axis, said shaft operably coupled with said orbiting scroll member;

a motor operably coupled with said shaft;
a crankcase fixed within said housing and disposed between said orbiting scroll member and said motor, said crankcase having a thrust surface engageable with said orbiting scroll member and defining a first opening, said crankcase including a bearing support portion defining a second opening, said shaft freely extending through said first opening and extending through and bearingly supported at said second opening;

said crankcase having a shield portion extending from proximate said first opening to proximate said second opening and defining a partial enclosure for said shaft

between said first opening and said second opening, said shield portion defining an aperture providing fluid communication between said interior plenum and said partial enclosure, said aperture axially extending from proximate said first opening to proximate said second opening, said shield portion circumferentially extending about said shaft through an arc of at least 180 degrees and spaced radially outwardly of said shaft;

a sheet-like baffle member secured to said crankcase and positioned proximate said inlet opening; and

wherein said crankcase has an outer perimeter which defines a recess providing access to a working space between said fixed and orbiting scroll members, said baffle member positioned adjacent said recess.

6. (currently amended): ~~The compressor assembly of claim 1~~ A compressor assembly comprising:

a housing defining an interior plenum and having an inlet opening;
a stationary scroll member fixed within said housing;

an orbiting scroll member disposed within said housing and engaged with said stationary scroll member;

an oil sump disposed within said interior plenum;
a shaft rotatable about a shaft axis, said shaft operably coupled with said orbiting scroll member;

a motor operably coupled with said shaft;
a crankcase fixed within said housing and disposed between said orbiting scroll member and said motor, said crankcase having a thrust surface engageable with said orbiting scroll member and defining a first opening, said crankcase including a bearing support portion defining a second opening, said shaft freely extending through said first opening and extending through and bearingly supported at said second opening;

said crankcase having a shield portion extending from proximate said first opening to proximate said second opening and defining a partial enclosure for said shaft between said first opening and said second opening, said shield portion defining an aperture wherein said aperture is positioned at a height above said shaft axis and providing fluid communication between said interior plenum and said partial enclosure, said aperture axially

extending from proximate said first opening to proximate said second opening, said shield portion circumferentially extending about said shaft through an arc of at least 180 degrees and spaced radially outwardly of said shaft; and

a sheet-like baffle member secured to said crankcase and positioned proximate said inlet opening.

7. (currently amended): The compressor assembly of ~~claim 1~~ claim 4 wherein said shield portion circumferentially extends about said shaft through an arc of at least about 270 degrees.

8. (original): A compressor assembly comprising:

- a housing defining an interior plenum;
- a stationary scroll member fixed within said housing;
- an orbiting scroll member disposed within said housing and engaged with said stationary scroll member;
- a shaft rotatable about a shaft axis, said shaft operably coupled with said orbiting scroll member;
- a motor operably coupled with said shaft;
- a crankcase disposed between said motor and said orbiting scroll member, said crankcase having a thrust surface engageable with said orbiting scroll member and defining a first opening, said crankcase including a bearing support portion defining a second opening, said shaft extending freely through said first opening and extending through and bearingly supported at said second opening, said crankcase including a plurality of legs extending from proximate said thrust surface in a direction substantially parallel to said shaft axis and having distal ends engageable with said motor, said crankcase having a shield portion extending from proximate said first opening to proximate said second opening and defining a partial enclosure for said shaft between said first opening and said second opening, said shield portion defining an aperture providing fluid communication between said interior plenum and said partial enclosure, said aperture axially extending from proximate said first opening to proximate said second opening, said shield portion circumferentially extending about said

shaft along an arc of at least 180 degrees and spaced radially outwardly of said shaft and radially inwardly of said plurality of legs; and

a baffle member secured to said crankcase and at least partially disposed radially between said shield portion and said legs.

9. (original): The compressor assembly of claim 8 further comprising a counterweight disposed on said shaft between said first and second openings within said partial enclosure.

10. (original): The compressor assembly of claim 8 wherein said baffle member is positioned radially outwardly of said aperture.

11. (original): The compressor assembly of claim 8 wherein said crankcase has an outer perimeter which defines a recess providing access to a working space between said fixed and orbiting scroll members, said baffle member positioned adjacent said recess.

12. (original): The compressor assembly of claim 8 wherein said aperture is positioned at a height above said shaft axis.

13. (original): The compressor assembly of claim 8 wherein said shield portion circumferentially extends about said shaft through an arc of at least about 270 degrees.

14. (new): A compressor assembly comprising:
a housing defining an interior plenum and having an inlet opening;
a stationary scroll member fixed within said housing;
an orbiting scroll member disposed within said housing and engaged with said stationary scroll member;
an oil sump disposed within said interior plenum;
a shaft rotatable about a shaft axis, said shaft operably coupled with said orbiting scroll member;
a motor operably coupled with said shaft;

a crankcase fixed within said housing and disposed between said orbiting scroll member and said motor, said crankcase having a thrust surface engageable with said orbiting scroll member and defining a first opening, said crankcase including a bearing support portion defining a second opening, said shaft freely extending through said first opening and extending through and bearingly supported at said second opening;

said crankcase having a shield portion extending from proximate said first opening to proximate said second opening and defining a partial enclosure for said shaft between said first opening and said second opening, said shield portion defining an aperture providing fluid communication between said interior plenum and said partial enclosure, said aperture substantially aligned with said inlet opening and axially extending from proximate said first opening to proximate said second opening, said shield portion circumferentially extending about said shaft through an arc of at least 180 degrees and spaced radially outwardly of said shaft; and

a baffle member secured to said crankcase over said aperture and positioned proximate said inlet opening.

15. (new): The compressor assembly of claim 14 wherein said aperture is positioned at a height above said shaft axis.

16. (new): A compressor assembly comprising:

a housing defining an interior plenum and having an inlet opening;
a stationary scroll member fixed within said housing;

an orbiting scroll member disposed within said housing and engaged with said stationary scroll member;

an oil sump disposed within said interior plenum;

a shaft rotatable about a shaft axis, said shaft operably coupled with said orbiting scroll member;

a motor operably coupled with said shaft;

a crankcase fixed within said housing and disposed between said orbiting scroll member and said motor, said crankcase having a thrust surface engageable with said orbiting scroll member and defining a first opening, said crankcase including a bearing

support portion defining a second opening, said shaft freely extending through said first opening and extending through and bearingly supported at said second opening;

said crankcase having a shield portion extending from proximate said first opening to proximate said second opening and defining a partial enclosure for said shaft between said first opening and said second opening, said shield portion defining an aperture providing fluid communication between said interior plenum and said partial enclosure, said aperture axially extending from proximate said first opening to proximate said second opening, said shield portion circumferentially extending about said shaft through an arc of at least 180 degrees and spaced radially outwardly of said shaft; and

a baffle member secured to said crankcase and positioned proximate said inlet opening, at least a portion of said baffle member positioned within said aperture.

17. (new): The compressor assembly of claim 16 wherein said aperture is positioned at a height above said shaft axis.